

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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|---|---------------------------------------|
| Applicant(s): <b>Silver et al.</b>                                    |                                       |
| Serial No.: <b>to be determined</b>                                   |                                       |
| Filed: <b>11/10/2003</b>  | Group Art Unit:<br><b>2621</b>        |
| Title: <b>Fast High-Accuracy Multi-Dimensional Pattern Inspection</b> | Examiner:<br><b>Mariam, Daniel G.</b> |
| Attorney Docket No.: <b>C97-050_CON9</b>                              |                                       |

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
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☒ Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

The relevance of the attached references is that this is the closest art of which Applicant is aware.

Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or the correspondence is being facsimile transmitted to the USPTO, on the date indicated below.

Date of Deposit: 11/10/03

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Arthur J. O'Dea

Attorney/Agent for Applicant(s)

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Date: November <sup>7</sup>/<sub>10</sub>, 2003

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| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(use as many sheets as necessary) |   |    |   | Application Number       | Not Known      |
|   |   |    |   | Filing Date              | 11/10/2003     |
|   |   |    |   | First Named Inventor     | Silver, et al. |
|   |   |    |   | Group Art Unit           | 2621           |
|   |   |    |   | Examiner Name            | D. Mariam      |
| Sheet   | 2 | of | 3 | Attorney Docket Number   | C97-050 CON9   |

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|   |          | COGNEX CORPORATION, "Description Sobel Search," Natick, MA USA, 1998 but public before the above-referenced filing date.  |                |
|   |          | COGNEX CORPORATION, "Chapter 7 CONLPAS," Cognex 3000/4000/5000 Programmable Vision Engines, Vision Tools, 1996, pp. 307-340, Revision 7.4 590-0136, Natick, MA USA  |                |
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|   |          | GUNILLA BORGEFORS, <u>Hierarchical Chamfer Matching: A Parametric Edge Matching Algorithm</u> , IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 10, No. 6, November 1988   |                |

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| Examiner Initials*                                | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|   |          | DANIEL P. HUTTENLOCHER AND WILLIAM J. RUCKLIDGE, <u>A Multi-Resolution Technique for Comparing Images Using the Hausdorff Distance</u> , Department of Computer Science, Cornell University, Ithaca, NY 14853,  |                |
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